DEPARTMENT OF THE **ARMY**
U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183-3435

May 12, 2025

Engineering and Construction Division
Hydraulics Branch

Ms. Carrie Barefoot
Environmental Permits Branch
Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Dear Ms. Barefoot:

Enclosed is a Large Construction Notice of Intent (LCNOI) requesting NPDES Storm Water Discharge Permit coverage for the Seepage Remediation Deeson, Item 611-L Project (enclosure 1). The LCNOI addresses the construction of seepage berms in Bolivar County. A copy of the Storm Water Pollution Prevention Plan (enclosure 2) and a site map (enclosure 3) are attached. Also attached is a copy of the November 1998 water quality certification letter issued for this project (enclosure 4) and a copy of the submittal form for the MDEQ Mining Permit Notice of Exempt Operations (enclosure 5).

Construction is scheduled to begin in September 2025 and is scheduled to be completed by July 2026. Prior to starting work, the contractor will be required to submit a completed Prime Contractor Certification form to your office.

If you have any questions or concerns regarding this permit application, please contact Ryan Horton at (601) 862-9820.

Sincerely,

William N. Bradley P.E.
Chief, Engineering and
Construction Division

ENCLOSURE 1. LCNOI

Mississippi River Levee Deeson, MS
Item 611-L Seepage Berms

Large Construction Notice of Intent

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

LARGE CONSTRUCTION NOTICE OF INTENT (LCNOI) FOR COVERAGE UNDER THE LARGE CONSTRUCTION STORM WATER GENERAL NPDES PERMIT

INSTRUCTIONS

The Large Construction Notice of Intent (LCNOI) is for coverage under the Large Construction General Permit for land disturbing activities of five (5) acres or greater; or for land disturbing activities, which are part of a larger common plan of development or sale that are initially less than five (5) acres but will ultimately disturb five (5) or more acres. Applicant must be the owner or operator. For construction activities, the operator is typically the prime contractor. The owner(s) of the property and the prime contractor associated with regulated construction activity on the property have joint and severable responsibility for compliance with the Large Construction Storm Water General Permit MSR10.

If the company seeking coverage is a corporation, a limited liability company, a partnership, or a business trust, attach proof of its registration with the Mississippi Secretary of State and/or its Certificate of Good Standing. This registration or Certificate of Good Standing must be dated within twelve (12) months of the date of the submittal of this coverage form. Coverage will be issued in the company name as it is registered with the Mississippi Secretary of State.

Completed LCNOIs should be filed at least thirty (30) days prior to the commencement of construction. Discharge of storm water from large construction activities without written notification of coverage is a violation of state law.

Submittals with this LCNOI must include:
- **A site-specific Storm Water Pollution Prevention Plan (SWPPP) developed in accordance with ACT5 of the General Permit**
- **A detailed site-specific scaled drawing showing the property layout and the features outlined in ACT5 of the General Permit**
- **A United States Geological Survey (USGS) quadrangle map or photocopy, extending at least one-half mile beyond the facility property boundaries with the site location and outfalls outlined or highlighted. The name of the quadrangle map must be shown on all copies. Quadrangle maps can be obtained from the MDEQ, Office of Geology at 601-961-5523.**

Additional submittals may include the following, if applicable:
- **Appropriate Section 404 documentation from U.S. Army Corps of Engineers**
- **Appropriate documentation concerning future disposal of sanitary sewage and sewage collection system construction**
- **Appropriate documentation from the MDEQ Office of Land & Water concerning dam construction and low flow requirements**
- **Approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties**
- **Antidegradation report for disturbance within Waters of the State**

ALL QUESTIONS MUST BE ANSWERED (Answer "NA" if the question is not applicable)

MSR10 __ __ __ __

(NUMBER TO BE ASSIGNED BY STATE)

APPLICANT IS THE: ☑ **OWNER** ☐ **PRIME CONTRACTOR**

OWNER CONTACT INFORMATION

OWNER CONTACT PERSON: William N. Bradley P.E.

OWNER COMPANY LEGAL NAME: US Army Corps of Engineers Vicksburg District

OWNER STREET OR P.O. BOX: 4155 East Clay Street

OWNER CITY: Vicksburg **STATE:** MS **ZIP:** 39183

OWNER PHONE #: (601) 631-5476 **OWNER EMAIL:** william.n.bradley@usace.army.mil

PREPARER CONTACT INFORMATION

IF NOI WAS PREPARED BY SOMEONE OTHER THAN THE APPLICANT

CONTACT PERSON: Ryan Horton

COMPANY LEGAL NAME: U S Army Corps of Engineers Vicksburg District

STREET OR P.O. BOX: 4155 East Clay Street

CITY: Vicksburg **STATE:** MS **ZIP:** 39183

PHONE # ( ) 601-862-9820 **EMAIL:** ryan.d.horton@usace.army.mil

PRIME CONTRACTOR CONTACT INFORMATION

PRIME CONTRACTOR CONTACT PERSON: To be named after award of contract

PRIME CONTRACTOR COMPANY LEGAL NAME:

PRIME CONTRACTOR STREET OR P.O. BOX:

PRIME CONTRACTOR CITY: **STATE:** **ZIP:**

PRIME CONTRACTOR PHONE #: (___)_____ **PRIME CONTRACTOR EMAIL:**

FACILITY SITE INFORMATION

FACILITY SITE NAME: Seepage Remediation Deeson, Item 611-L

FACILITY SITE ADDRESS (If the physical address is not available, please indicate the nearest named road. For linear projects indicate the beginning of the project and identify all counties the project traverses.)

STREET: Hwy 1

CITY: Deeson STATE: MS COUNTY: Bolivar ZIP: 38769

FACILITY SITE TRIBAL LAND ID (N/A If not applicable):

LATITUDE: 34 **degrees** 00 **minutes** 49 **seconds** **LONGITUDE:** 90 **degrees** 55 **minutes** 56 **seconds**

LAT & LONG DATA SOURCE (GPS *(Please GPS Project Entrance/Start Point)* or Map Interpolation): Google Earth

TOTAL ACREAGE THAT WILL BE DISTURBED [1]: 120 Acres

IS THIS PART OF A LARGER COMMON PLAN OF DEVELOPMENT? YES ☐ NO ☑

IF YES, NAME OF LARGER COMMON PLAN OF DEVELOPMENT: _____
AND PERMIT COVERAGE NUMBER: MSR10_ _ _ _

ESTIMATED CONSTRUCTION PROJECT START DATE: 2025-09-01 (YYYY-MM-DD)

ESTIMATED CONSTRUCTION PROJECT END DATE: 2026-07-01 (YYYY-MM-DD)

DESCRIPTION OF CONSTRUCTION ACTIVITY: clearing and grubbing, berm embankment, mowing and turfing, etc.

PROPOSED DESCRIPTION OF PROPERTY USE AFTER CONSTRUCTION HAS BEEN COMPLETED:
grassed levee

SIC Code: 1629 ___ ___ ___ **NAICS Code** _ _ _ _ _ _

NEAREST NAMED RECEIVING STREAM: Mississippi River and Old River Lake oxbow (North of Rosedale, MS)

IS RECEIVING STREAM ON MISSISSIPPI'S 303(d) LIST OF IMPAIRED WATER BODIES? (The 303(d) list of impaired waters and TMDL stream segments may be found on MDEQ's web site: http://www.deq.state.ms.us/MDEQ.nsf/page/TWB_Total_Maximum_Daily_Load_Section) YES ☐ NO ☑

HAS A TMDL BEEN ESTABLISHED FOR THE RECEIVING STREAM SEGMENT? YES ☐ NO ☑

FOR WHICH POLLUTANT:

ARE THERE RECREATIONAL STREAMS, PRIVATE/PUBLIC PONDS OR LAKES WITHIN ½ MILE DOWNSTREAM OF PROJECT BOUNDRY THAT MAY BE IMPACTED BY THE CONSTRUCTION ACTIVITY? YES ☑ NO ☐

EXISTING DATA DESCRIBING THE SOIL (for linear projects please describe in SWPPP):

WILL FLOCCULANTS BE USED TO TREAT TURBIDITY IN STORM WATER? YES ☐ NO ☑

IF YES, INDICATE THE TYPE OF FLOCCULANT. ☐ **ANIONIC POLYACRYLIMIDE (PAM)**
☐ **OTHER** _____

IF YES, DOES THE SWPPP DESCRIBE THE METHOD OF INTRODUCTION, THE LOCATION OF INTRODUCTION AND THE LOCATION OF WHERE FLOCCULATED MATERIAL WILL SETTLE?

IS A SDS SHEET INCLUDED FOR THE FLOCCULATE? YES ☐ NO ☐

WILL THERE BE A 50 FT BUFFER BETWEEN THE PROJECT DISTURBANCE AND THE WATERS OF THE STATE? YES ☑ NO ☐

IF NOT, PROVIDE EQUIVALENT CONTROL MEASURES IN THE SWPPP.

[1]Acreage for subdivision development includes areas disturbed by construction of roads, utilities and drainage. Additionally, a housesite of at least 10,000 ft^2 per lot (entire lot, if smaller) shall be included in calculating acreage disturbed.

DOCUMENTATION OF COMPLIANCE WITH OTHER REGULATIONS/REQUIREMENTS

COVERAGE UNDER THIS PERMIT WILL NOT BE GRANTED UNTIL ALL OTHER REQUIRED MDEQ PERMITS AND APPROVALS ARE SATISFACTORILY ADDRESSED

IS LCNOI FOR A FACILITY THAT WILL REQUIRE OTHER PERMITS? YES ☐ NO ☑

IF YES, CHECK ALL THAT APPLY: ☐ AIR ☐ HAZARDOUS WASTE ☐ PRETREATMENT

☐ WATER STATE OPERATING ☐ INDIVIDUAL NPDES ☐ OTHER: _____

IS THE PROJECT REROUTING, FILLING OR CROSSING A WATER CONVEYANCE OF ANY KIND? (If yes, contact the U.S. Army Corps of Engineers' Regulatory Branch for permitting requirements.) YES ☐ NO ☑

IF THE PROJECT REQUIRES A CORPS OF ENGINEER SECTION 404 PERMIT, PROVIDE APPROPRIATE DOCUMENTATION THAT:

-The project has been approved by individual permit, or
-The work will be covered by a nationwide permit and NO NOTIFICATION to the Corps is required, or
-The work will be covered by a nationwide or general permit and NOTIFICATION to the Corps is required

IS THE PROJECT REROUTING, FILLING OR CROSSING A STATE WATER CONVEYANCE OF ANY KIND? (If yes, please provide an antidegradation report.) YES ☐ NO ☑

IS A LAKE REQUIRING THE CONSTRUCTION OF A DAM BEING PROPOSED? (If yes, provide appropriate approval documentation from MDEQ Office of Land and Water, Dam Safety.) YES ☐ NO ☑

IF THE PROJECT IS A SUBDIVISION OR A COMMERCIAL DEVELOPMENT, HOW WILL SANITARY SEWAGE BE DISPOSED? Check one of the following and attach the pertinent documents.

☐ **Existing Municipal or Commercial System. Please attach plans and specifications for the collection system and the associated "Information Regarding Proposed Wastewater Projects" form or approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties. If the plans and specifications can not be provided at the time of LCNOI submittal, MDEQ will accept written acknowledgement from official(s) responsible for wastewater collection and treatment that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow.**

☐ **Collection and Treatment System will be Constructed. Please attach a copy of the cover of the NPDES discharge permit from MDEQ or indicate the date the application was submitted to MDEQ (Date: _____.)**

☐ **Individual Onsite Wastewater Disposal Systems for Subdivisions Less than 35 Lots. Please attach a copy of the Letter of General Acceptance from the Mississippi State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.**

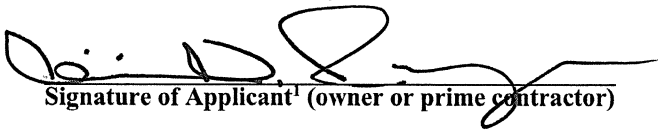
☐ **Individual Onsite Wastewater Disposal Systems for Subdivisions Greater than 35 Lots. A determination of the feasibility of installing a central sewage collection and treatment system must be made by MDEQ. A copy of the response from MDEQ concerning the feasibility study must be attached. If a central collection and wastewater system is not feasible, then please attach a copy of the Letter of General Acceptance from the State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.**

INDICATE ANY LOCAL STORM WATER ORDINANCE (I.E. MS4)WITH WHICH THE PROJECT MUST COMPLY:

_____

_____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Signature of Applicant[1] (owner or prime contractor)

5/13/25

Date Signed

William N. Bradley P.E.

Printed Name[1]

Chief, Engineering and Construction Division

Title

[1]This application shall be signed as follows:

- **For a corporation, by a responsible corporate officer.**
- **For a partnership, by a general partner.**
- **For a sole proprietorship, by the proprietor.**

For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official

Please submit the LCNOI form to:

Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Electronically: **https://www.mdeq.ms.gov/construction-stormwater/**

Revised 3/23/22

ENCLOSURE 2. SWPPP

Mississippi River Levee Deeson, MS
Item 611-L Seepage Berms

Large Construction Notice of Intent

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 57 20.00 09

ENVIRONMENTAL PROTECTION

-- End of Section Table of Contents --

SECTION 01 57 20.00 09

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 DEFINITIONS

Environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare; unfavorably alter ecological balances of importance to life; or degrade the environment for aesthetic, cultural or historical purposes. Environmental protection is the prevention and/or control of pollution that develops during normal construction practice. The control of environmental pollution and damage requires consideration of air, water, soil, and land resources; and includes management of visual aesthetics; noise; solid, chemical, and liquid waste; radiant energy and radioactive materials; and other pollutants.

1.2 SUBMITTALS

Government approval is required for all submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environmental Protection Plan; G, GA

1.3 ENVIRONMENTAL PROTECTION REQUIREMENTS

A plan shall be developed to provide for environmental protective measures to prevent and/or control pollution that may develop during construction. The plan shall contain protective measures required to prevent or correct conditions that may develop during the construction. The liability for environmental noncompliance shall be borne by the Contractor.

1.3.1 Environmental Protection Plan

Within 15 days after receipt of Notice of Award of the contract and at least 7 days prior to the Preconstruction Conference, the Contractor shall submit in writing an Environmental Protection Plan. No physical work at the site shall begin until the Contracting Officer has approved the plan and provided specific authorization to start a phase of the work. Preparation and submittal of supplemental plan(s) may be necessary for later phases of work. A copy of the complete Environmental Protection Plan shall be maintained on-site at all times during the life of the contract. The environmental protection plan shall include but not be limited to the following:

1.3.1.1 Protection of Features

In accordance with the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS, the Contractor shall

develop methods for the protection of features to be preserved within authorized work areas. The Contracting Officer will prepare a list of resources needing protection and preservation (i.e., trees, shrubs, vines, grasses and ground cover, wetlands, landscape features, air quality, noise levels, surface and ground water quality, fish and wildlife, soil, historic, archaeological and cultural resources). The Contractor's plan shall identify methods to protect these and other resources present and specify measures to protect the environment should an accident, natural causes of pollution, or failure to follow the environmental protection plan occur during construction. The Contractor's plan shall specify how the quality and protective measures of these resources shall be monitored. Furthermore the Contractor's plan shall specify how and where waste shall be disposed.

1.3.1.2 Procedures

The Contractor shall implement procedures to provide the required environmental protection and to comply with the applicable laws and regulations. The Contractor shall set out the procedures to be followed to correct pollution of the environment due to accident, natural causes or failure to follow the procedures set out in accordance with the environmental protection plan.

1.3.1.3 Permit or License

Notwithstanding the Contract Clause PERMITS AND RESPONSIBILITIES, the Government will obtain a National Pollution Discharge Elimination System (NPDES) Permit for storm water discharges from construction activities. The Contractor shall obtain all other needed permits or licenses. The Contractor shall be responsible for complying with all permits and licenses throughout the duration of this contract.

1.3.1.4 Drawings

The Contractor shall include drawings identifying the areas of limited use or nonuse and show locations of any proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, stockpiles of earth materials, and disposal areas for excess earth material and unsuitable earth materials.

1.3.1.5 Recycling and Waste Prevention Plan

The Contractor shall submit as a part of the Environmental Protection Plan, a Recycling and Waste Prevention Plan.

1.3.1.6 Environmental Monitoring Plans

The Contractor shall include environmental monitoring plans for the job site which incorporate land, water, air and noise monitoring.

1.3.1.7 Traffic Control Plan

The Contractor shall include a traffic control plan for the job site. This plan shall focus on reducing erosion of temporary roadbeds by construction traffic, especially during wet weather, and reducing the amount of mud transported onto paved public roads by motor vehicles or runoff.

1.3.1.8 Surface and Ground Water

The Contractor shall establish methods of protecting surface and ground water during construction activities. These water courses, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands, shall be protected from pollutants such as petroleum products, fuels, oils, lubricants, bentonite, bitumens, calcium chloride, acids, waste washings, sewage, chlorinated solutions, herbicides, insecticides, lime, wet concrete, cement, silt, or organic or other deleterious material. Chemical emulsifiers, dispersants, coagulants, or other cleanup compounds shall not be used without prior written approval from the Contracting Officer. Waters used to wash equipment shall be disposed to prevent entry into a waterway until treated to an acceptable quality. Fuels, oils, greases, bitumens, chemicals, and other nonbiodegradable materials shall be contained with total containment systems and removed from the site for disposal in an approved manner.

1.3.1.9 Noise Intrusion

The Contractor shall exercise controls to minimize damage to the environment by noise from construction activities. All Contractor's, subcontractors', and suppliers' equipment used on or in the vicinity of the job site shall be equipped with noise suppression devices. Equipment not so suppressed and properly maintained must be approved for use in writing by the Contracting Officer. Areas that have noise levels greater than 85 dB continuous or 140 dB peak (unweighted) impulse must be designated as noise hazardous areas. These work areas must have caution signs displayed at the perimeter of the noise area indicating the presence of hazardous noise levels and requiring the use of hearing protection devices.

1.3.1.10 Work Area Plan

The Contractor shall include a work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. The plan shall include measures for marking the limits of use areas.

1.3.1.11 Plan of Borrow Area(s)

All borrow areas will be furnished by the Government as shown on the drawings and as specified in Section 31 23 00.00 09 EXCAVATION. Contractor furnished borrow areas will not be permitted.

1.3.1.12 Contaminant Prevention Plan

The Contractor shall identify potentially hazardous substances to be used on the job site and intended actions to prevent accidental or intentional introduction of such materials into the air, water or ground. The Contractor shall detail provisions to be taken regarding the storage and handling of these materials. The plan shall include, but not be limited to, plans for preventing polluted runoff from plants, parked equipment, and maintenance areas from entering local surface and ground water sources.

1.3.1.13 Storm Water Pollution Prevention Plan

As required in Section 01 57 23.02 09 STORM WATER POLLUTION PREVENTION PLAN, the Contractor shall address the impact of construction upon erosion of the earth's surface and the introduction of pollutants into water

courses. The Storm Water Pollution Prevention Plan shall include the Contractor's plan for controlling pollution, sediment and soil erosion and for disposing of wastes. The plan shall identify all temporary and permanent erosion and sediment control measures adopted such as soil stabilization, seeding, mulching, sprinkling, ditching, diking, draining, and constructing sedimentation basins, silt fences, straw bales and diversion ditches.

1.4 ENVIRONMENTAL LITIGATION

a. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor, or a Subcontractor at any tier, not required by the terms of the contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor, or a Subcontractor at any tier, other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the SUSPENSION OF WORK clause of this contract. The period of such suspension, delay, or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

b. The term "Environmental Litigation", as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 PROTECTION OF ENVIRONMENTAL RESOURCES

The Contractor shall protect the environmental resources, such as, but not limited to, historic, archaeological and cultural resources; land, water (rivers, streams, bayous, lakes, ponds, bogs, and wetlands), and air resources; and fish and wildlife resources within the project boundaries and those affected outside the limits of permanent work under this contract.

3.1.1 Protection of Land Resources

In accordance with the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS, the land resources within the project boundaries and those affected outside the limits of work under this contract shall be preserved in their present condition or be restored to an equivalent condition upon completion of the work. Prior to initiating any construction, the Contractor shall identify all land resources to be preserved within the work area, including those identified by the Contracting Officer. The Contractor shall not remove, cut, deface,

injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and landforms without permission from the Contracting Officer unless otherwise specified. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such special emergency use is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times and shall be responsible for any subsequent damage as defined in the following subparagraphs.

3.1.1.1 Work Area Limits

Prior to any construction, the Contractor shall mark the areas within the designated work areas that are not required to accomplish work to be performed under this contract and which are to be protected. Isolated areas within the general work area which are to be saved and protected shall be marked or fenced. Monuments and markers shall be protected during construction. Where construction operations are to be conducted during darkness, the markers shall be visible. The Contractor shall convey to his personnel the purpose of marking and protecting all necessary objects.

3.1.1.2 Protection of Landscape

Trees, shrubs, vines, grasses, landforms and other landscape features, indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

3.1.1.3 USDA Quarantined Considerations

See Section 01 00 00.00 09 GENERAL CONTRACT REQUIREMENTS, paragraph WORK IN QUARANTINED AREA.

3.1.1.4 Location of Contractor On-Site Facilities

The Contractor's on-site field offices, staging areas, stockpile storage, and temporary buildings shall be placed in approved areas. Temporary movement or relocation of Contractor on-site facilities shall be only on approval by the Contracting Officer.

3.1.1.5 Borrow Areas

Borrow areas shall be managed by the Contractor to minimize erosion and to prevent sediment from entering rivers, streams, bayous, lakes, ponds, bogs, and wetlands, or affecting known or discovered cultural resource properties.

3.1.1.6 Disposal Areas on Government Property

Material disposal on government property shall be limited to those areas as specified in Section 31 11 00.00 09 CLEARING AND GRUBBING, paragraph BURYING, and Section 31 23 00.00 09 EXCAVATION, paragraph UNSUITABLE MATERIALS. The disposal areas shall be managed and controlled to prevent erosion of soil or sediment from entering rivers, streams, bayous, lakes, ponds, bogs, and wetlands. Special emphasis shall be placed on avoiding impacts to wetlands. Disposal areas shall be developed and managed in accordance with the grading plan indicated on the contract drawings or as approved.

3.1.1.7 Disposal of Solid Wastes

Solid wastes (not including clearing debris) shall be any waste excavated or generated by the Contractor. Solid waste shall be placed in accessible containers and disposed on a regular schedule to prevent the accumulation of waste on-site. All handling and disposal shall be conducted to prevent spillage and contamination. The Contractor shall transport all solid waste off government property and dispose properly. The Contractor shall participate in any State or local recycling programs to reduce the volume of solid waste materials at the source whenever practical. The location of on-site waste receptacles cannot be placed on project drawings due to the linear nature of the project. The location of solid waste receptacles is expected to move with the progress of the project.

3.1.1.8 Disposal of Hazardous Wastes

Hazardous waste shall be stored, removed from the work area, and disposed of in accordance with all applicable Federal, State, and local laws and regulations. Hazardous waste shall not be dumped onto the ground; into storm sewers; or open water courses, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands; or into the sanitary sewer system. Fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation.

3.1.1.9 Disposal of Discarded Materials

Discarded materials that cannot be included in the solid waste category shall be handled as approved.

3.1.1.10 Disposal of Used Oils

Used oils and/or lubricants shall be disposed of in accordance with all Federal, State, and local laws and regulations. The Contractor shall collect used oil and/or lubricants in leak-tight containers, ensure that all openings on the containers are tightly sealed (including the drum ring and bung closures), and label the containers to clearly indicate contents. Disposal through a used oil recycler is required. The Contractor shall ensure that the recycler has all appropriate State and Federal permits.

3.1.1.11 Refueling Facilities and Equipment Maintenance Areas

Fuel tanks should have secondary containment measures to ensure that fuel does not leave the construction site and enter into nearby water bodies or wetlands. The contractor shall provide a Spill Prevention, Control, and Countermeasure (SPCC) Plan for fuel tanks that will be stored on-site. Necessary controls to implement the SPCC Plan shall be on-site in an accessible location for use if a spill does occur. All refueling operations shall be performed in a manner as to prevent fuels from leaving the construction site and entering water bodies or wetlands. Equipment maintenance operations shall also be performed in a manner to prevent fuel, oils, and grease from leaving the site and entering water bodies or wetlands. The location of on-site fueling operations and maintenance activities are not on project drawings due to the linear nature of the project. The location of the refueling and maintenance activities is expected to move with the progress of the project.

3.1.1.12 Storage of Herbicides, Pesticides, and Fertilizers

Herbicides, Pesticides, and Fertilizers that are to be used in the construction of the project shall be either stored off-site or in a waterproof container to prevent the movement of these chemicals off-site from stormwater. Due to the linear nature of the project, the location of the storage facilities for herbicides, pesticides, and fertilizers is not shown on the project drawings.

3.1.2 Historical, Archaeological and Cultural Resources

The Contractor shall take precautions to preserve existing historical, archaeological and cultural resources. The Contractor shall install protection for these resources and shall be responsible for their preservation during this contract. If during construction activities the Contractor observes items that may have archaeological or historic value (e.g., when Native American human remains and associated objects are discovered), the Contractor shall stop work in the area, leave the items undisturbed, and immediately report the find to the Contracting Officer. Such items may include historic artifacts of glass, metal and ceramics, or prehistoric artifacts such as stone tools, ceramics, bone, and shell. The Contractor shall not judge the potential significance of any suspected cultural material, but shall report all findings to the Contracting Officer.

3.1.3 Protection of Water Resources

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands. All construction activities shall meet the requirements of the National Pollutant Discharge Elimination System (NPDES) General Permits for Storm Water Discharges from Construction Sites. Discharges of any pollutant into the water courses is strictly prohibited, unless accepted by the Contracting Officer.

3.1.3.1 Waste Water

Waste water directly derived from washing equipment or any other construction activities shall not be discharged into any natural water areas, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands.

3.1.3.2 Monitoring of Water Areas Affected by Construction Activities

The Contractor shall be responsible for monitoring all water areas affected by construction activities. In the event that water quality violations result from the Contractor's operation, the Contractor shall suspend the operation or operations causing the pollution, and such suspension shall not form the basis for a claim against the Federal government.

3.1.4 Protection of Aquatic and Wildlife Resources

The Contractor shall keep construction activities under surveillance, management, and control to prevent interference with, disturbance to, and damage to aquatic resources and/or wildlife, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands. Special emphasis shall be placed on protecting wetlands. Species that require

specific attention as defined by law or specified by the Contracting Officer, along with measures for their protection, shall be listed by the Contractor prior to beginning of construction operations.

a. Prior to beginning construction operations, the Contractor shall consult with the Contracting Officer for the latest interior least tern survey information to determine if any interior least tern nest colony is located within the proposed construction sites. Construction is prohibited within 200 feet of nesting least tern colonies. If during construction activities the Contractor observes interior least tern colonies within the distance stated above, the Contractor shall stop work in the area, leave the terns undisturbed, and immediately notify the Contracting Officer.

b. No work shall be performed during the period of 1 April through 30 June, inclusive, of each year (pallid sturgeon spawning season), and such period has not been considered in computing the time allowed for completion.

c. No work shall be performed within 1,500 feet of any bald eagle nest during the time of egg laying, incubation, and the first month after hatching (1 October through 15 May of each year). This period may be shortened if it is determined that such construction would not impact the bald eagles. If during any construction activities, the Contractor observes bald eagles or bald eagle nests within the distance stated above, the Contractor shall stop work in the area, leave the eagles undisturbed, and immediately notify the Contracting Officer.

3.1.5 Protection of Aquatic and Wildlife Resources

The Contractor shall keep construction activities under surveillance, management, and control to prevent interference with, disturbance to, and damage to aquatic resources and/or wildlife, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands. Special emphasis shall be placed on protecting wetlands. Species that require specific attention as defined by law or specified by the Contracting Officer, along with measures for their protection, shall be listed by the Contractor prior to beginning of construction operations.

3.1.6 Protection of Air Resources

The Contractor shall keep construction activities under surveillance, management and control to minimize pollution of air resources. Special management techniques as set out below shall be implemented to control air pollution by the construction activities.

3.1.6.1 Particulates

Dust particles, aerosols, and gaseous by-products from all construction activities, disturbed areas, and/or processing and preparation of materials, such as from asphaltic batch plants, shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, disposal sites, borrow areas, and all other work areas within or outside the project boundaries free from particulates which would cause air pollution standards specified in paragraph PROTECTION OF AIR RESOURCES to be exceeded or which would cause a hazard or a nuisance. Sprinkling,

chemical treatment of an approved type, light bituminous treatment, baghouse, scrubbers, electrostatic precipitators, or other methods will be permitted to control particulates in the work area. Sprinkling shall be repeated at such intervals as to keep the disturbed area damp at all times.

3.1.6.2 Hydrocarbons and Carbon Monoxide

Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal, State, and local allowable limits at all times.

3.1.6.3 Volatile Organic Compound (VOC)

The Contractor shall comply with Federal, State, and local laws and regulations pertaining to emission of VOC vapors at all times.

3.1.6.4 Odors

Odors shall be controlled at all times for all construction activities, including processing and preparation of materials.

3.1.6.5 Monitoring Air Quality

Monitoring of air quality at the construction site(s) shall be the responsibility of the Contractor.

3.2 NONCOMPLIANCE

If the Contracting Officer notifies the Contractor in writing of any observed noncompliance with contract requirements or Federal, State, or local laws, regulations, or permits, the Contractor shall take all necessary action to correct the noncompliance. Such notice, when delivered to the Contractor at the worksite, shall be deemed sufficient for the purpose of notification. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action is taken. No time extensions will be granted or costs or damage allowed to the Contractor for any such suspension. (See also the Contract Clause PERMITS AND RESPONSIBILITIES.)

3.3 CONTAINMENT AND CLEANUP OF CONTAMINANT RELEASES

The Contractor shall provide the Contracting Officer for approval, a contaminant containment and cleanup plan including the procedures, instructions, and reports to be used in the event of an unforeseen substance release. This plan shall include as a minimum:

a. The name of the individual who will be responsible for implementing and supervising the containment and cleanup.

b. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

c. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material placement equipment available in case of an unforeseen spill emergency.

d. The methods and procedures to be used for expeditious contaminant

cleanup.

e. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer in addition to the legally required reporting channels when a reportable quantity spill of oil or hazardous substance occurs.

3.4 POSTCONSTRUCTION CLEANUP

The Contractor shall clean up areas used for construction and remove all signs of temporary construction facilities; Contractor office, storage and staging areas; quarry and borrow areas, and all other areas used by the Contractor during construction. Furthermore, the disturbed areas shall be graded and filled as approved by Contracting Officer. Restoration of original contours is not required unless specified in another section. (See also the Contract Clause CLEANING UP.)

3.5 RESTORATION OF LANDSCAPE DAMAGE

All landscape features damaged or destroyed during construction operations that were not identified for removal shall be restored. Any vegetation or landscape feature damaged shall be restored as nearly as possible to its original condition. (See also the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS.)

3.6 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain all constructed facilities and portable pollution control devices for the duration of the contract or for the length of time construction activities create the particular pollutant.

3.7 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL

Contractor personnel shall be trained in environmental protection and conduct environmental protection meetings monthly. The training and meeting agenda shall include methods of detecting and avoiding pollution, wetland identification, familiarization with pollution standards, both statutory and contractual, and installation and care of facilities (vegetative covers, and instruments required for monitoring purposes) to insure adequate and continuous environmental pollution control. Personnel are to be informed of provisions for hazardous and toxic materials container labeling and for managing Material Safety Data Sheets (MSDS). Anticipated hazardous or toxic chemicals shall also be reviewed. Other items to be discussed shall include recognition and protection of archaeological sites, artifacts, and wetlands. The Contractor shall include training topics discussed and attendance as a part of his daily CQC Report.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 57 23.00 09

STORM WATER POLLUTION PREVENTION PLAN

SECTION 01 57 23.00 09

STORM WATER POLLUTION PREVENTION PLAN

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D 4354	(1999; R 2009) Sampling of Geosynthetics for Testing
ASTM D 4439	(2004) Geosynthetics
ASTM D 4491	(1999a; R 2009) Water Permeability of Geotextiles by Permittivity
ASTM D 4533	(2004; R 2009) Trapezoid Tearing Strength of Geotextiles
ASTM D 4632	(2008) Grab Breaking Load and Elongation of Geotextiles
ASTM D 4751	(2004) Determining Apparent Opening Size of a Geotextile
ASTM D 4759	(2002; R 2007) Determining the Specification Conformance of Geosynthetics
ASTM D 4873	(2002; R 2009) Identification, Storage, and Handling of Geosynthetic Rolls and Samples

1.2 SYSTEM DESCRIPTION

All construction activities conducted by the Contractor shall be performed in full compliance with the latest version of the State of Mississippi Large Construction Storm Water General Permit for storm water discharges from construction activities. Pursuant to the State of Mississippi Large Construction Storm Water General Permit for storm water discharges from construction activities, the requirements contained herein shall constitute the Storm Water Pollution Prevention Plan, hereafter called the SWPP Plan for this contract. The Contractor shall implement and diligently pursue all measures required herein. The purpose of the SWPP Plan is to control storm water volume and velocity within the site to minimize the soil erosion resulting from construction activities under this contract to prevent sediment from accumulating in existing drainage ditches, . Requirements under this section of the specifications are supplemental to and shall become part of the overall Environmental Protection Plan required by Section 01 57 20.00 09 ENVIRONMENTAL PROTECTION.

1.2.1 Process for Viewing Current Mississippi Large Construction Storm Water General Permit

The latest permit and applicable forms are available on the Internet at http://www.deq.state.ms.us/MDEQ.nsf/page/epd_epdgeneral?OpenDocument. Prior to making an offer, offerors should view the referenced website for the latest permit requirements and applicable forms. No separate payment will be made for complying with the requirements of this Section, or for complying with requirements of the current Mississippi Large Construction Storm Water General Permit, or for obtaining and complying with any other permits required for this contract.

1.2.2 Permit Notifications

The Contractor shall notify the permitting agency by certifying and submitting a Prime Contractor Certification Form and Notice of Termination as required by the Large Construction Storm Water General Permit for storm water discharges for this project as stated below. The Contractor shall maintain copies of all correspondence with the permitting agency with the SWPP Plan for the duration of this contract.

1.2.3 Prime Contractor Certification Form

A Large Construction Notice of Intent (LCNOI) and the SWPPP required by the State of Mississippi will be filed by the Government with the permitting agency prior to the award of this contract. The Contractor shall complete the Prime Contractor Certification form indicating that he takes responsibility for permit compliance and meeting permit conditions prior to the commencement of construction activities. The Contractor shall certify and submit the Prime Contractor Certification form to the permitting agency at least 48 hours prior to beginning work. The Contractor shall furnish two (2) copies of the submitted documentation to the Contracting Officer.

1.2.4 Notice of Termination (NOT) of Coverage

Upon successful completion of all permanent erosion and sediment controls for this project, and at the direction of the Contracting Officer, the Contractor shall submit a Notice of Termination (NOT) of Coverage to the Mississippi Department of Environmental Quality stating that all permanent erosion and sediment controls have been completed. The Contractor shall also provide three copies of the submitted documentation to the Contracting Officer and one copy to U.S. Army Corps of Engineers, Vicksburg District, 4155 Clay Street, Vicksburg, Mississippi 39183-3435, Attn: Water Quality Section.

1.2.5 Inspection Suspension Form

The Contractor may request the suspension of weekly inspection and monthly reporting requirements on portions of the project area if the Contractor certifies that: (1) land disturbing activities have temporarily ceased; (2) no further land disturbing activities are planned for a period of at least 6 months; (3) the site is stable with no active erosion; and (4) vegetative cover has been established.

The Contractor shall submit to the permitting agency a completed Inspection Suspension Form along with color photographs representative of the site as stipulated in the Large Construction Storm Water General

Permit. The Contractor shall notify MDEQ once construction activities are resumed and the weekly inspections shall commence immediately and as required by the permit. The Contractor shall still be responsible for all permit conditions during any suspension period.

1.3 SUBMITTALS

Government approval is required for all submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-07 Certificates

Filter Fabric

The Contractor shall submit a certificate of compliance attesting that the filter fabric meets the specified requirements.

1.4 SITE DESCRIPTION

1.4.1 Nature of Construction Activity

The work consists of furnishing all plant, labor, materials and equipment, and constructing Item 611-L seepage berms in Bolivar County, Mississippi. Principal features of the work include mobilization and demobilization, clearing and grubbing, uncompacted landside berm embankment, mowing, turfing, erosion control matting, storm water pollution prevention and environmental protection.

1.4.2 Major Activities Which Disturb Soils

The major activities which will disturb the soil at the site include clearing and grubbing, excavation, embankment construction, and grading.

1.4.3 Estimated Areas Affected

The total area of the construction site is approximately 419 acres. The area of soil that will be disturbed is approximately 122 acres.

1.4.4 Runoff Coefficient

The estimated runoff coefficient at the site will be 0.55 after construction activities are completed.

1.4.5 Precipitation Information

The project is located in Bolivar, Mississippi which has a rainfall frequency value of 4.17 inches for the 2 year, 24-hour event.

1.4.6 Contract Drawings and Specifications

The following features are shown on or can be determined from the contract drawings and specifications:

a. The approximate slopes after the major construction activities.

b. Areas of soil disturbance.

c. The location where stabilization practices are required.

d. The location of major structural and nonstructural controls identified in the SWPP Plan.

e. Surface waters.

f. Locations where storm water is discharged into a surface water.

g. Typical best management practices which are anticipated to be used in the control of sediment and erosion control.

1.4.7 Waters Affected

The surface water which may be affected by this contract is the Mississippi River . A review of the State of Mississippi latest 303(d) List of Impaired Water Bodies does not identify this waterbody as being impaired.

1.4.8 Non-Storm Water Discharges

1.4.8.1 Allowable Non-Storm Water Discharges

a. Discharges from actual fire-fighting activities.

b. Fire hydrant flushing.

c. Water used to control dust.

d. Potable water sources including uncontaminated water line flushing.

e. Routine external building wash down that does not use detergents.

f. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used.

g. Uncontaminated air conditioning or compressor condensation.

h. Uncontaminated ground water or spring water.

i. Foundation or footing drains where flows are not contaminated with process materials such as solvents.

j. Landscape irrigation.

k. Water used to wash vehicles, wheel wash water and other wash waters where detergents are not used.

1.4.8.2 Prohibited Non-Storm Water Discharges

a. Wastewater from washout of concrete (unless managed by appropriate control).

b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials

c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.

d. Soaps or solvents used in vehicle and equipment washing.

e. Wastewater from sanitary facilities, including portable toilets.

f. Dewatering activities, including discharges from dewatering of trenches and excavations unless managed by BMP's.

1.5 CONTROLS

The controls and measures required by the Contractor are described below.

1.5.1 Erosion and Sediment Controls

The contractor is responsible for the management of storm water.

The Contractor shall maintain a log of the dates when major grading activities occur, (e.g. clearing and grubbing, excavation, embankment construction, and grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated.

1.5.1.1 Stabilization Practices

a. General - The stabilization practices required to be implemented shall include temporary seeding, permanent seeding or sprigging, mulching, erosion control matting, protection of trees, preservation of mature vegetation, etc. However, the Contractor may, at his option and at no additional cost to the Government, provide a fall and winter temporary erosion control measure by seeding with rye grass or other approved winter grasses. The Contractor shall maintain a log of the dates when the major grading activities occur, (e.g. clearing and grubbing, excavation, embankment construction, and grading); when construction activities permanently cease on a portion of the site; and when stabilization practices are initiated, and shall attach this log to the SWPP Plan. Vegetative stabilization measures must be initiated immediately whenever any land disturbing activities have temporarily or permanently ceased on any portion of the site and will not resume for a period of fourteen (14) calendar days or more.

b. Interim Stabilization Practices - The interim stabilization practices required are described below.

(1) Only trees that are within the indicated limits to construct the permanent work shall be removed.

(2) Existing vegetative cover shall be preserved to the extent possible to reduce erosion.

c. Permanent Stabilization Practices - The permanent stabilization practices to be implemented are described below.

(1) .Permanent seeding or sprigging (establishment of turf) shall be performed in accordance with Section 32 92 06.00 09 EXISTING TURF MAINTENANCE AND NEW TURF ESTABLISHMENT.

(2) Mulch shall be placed on areas of permanent turfing treatment as specified.

(3) Erosion control matting for levee ramps shall be in accordance with Section 32 92 04.00 09 EROSION CONTROL MATTING.

(4) Turfing for levee ramps shall be in accordance with Section 32 92 00.00 09 EXISTING TURF MAINTENANCE AND NEW TURF ESTABLISHMENT..

1.5.1.2 Structural Practices

a. General - Structural practices shall be implemented to divert flows from exposed soils, temporarily store flows, or otherwise control runoff in order to prevent sediments from accumulating in existing drainage ditches, leaving the contract rights-of-way, or entering the Yazoo River. The Contractor shall implement the required structural practices and the necessary structural practices as may be required to control runoff for his construction methods and procedures. The installation of these measures may be subject to Section 404 of the Clean Water Act. The Contractor shall be responsible for obtaining the Section 404 permit if required for any structural practice he proposes to implement. Structural practices shall be implemented at the start of the construction process or at the start of each phase of construction to minimize erosion and sediment runoff. Structural practices shall be removed after they have served their intended purpose and after their removal has been approved by the Contracting Officer.

b. Devices - Structural practices may include but shall not be limited to the following devices (typical details are shown on the drawings):

(1) Silt fences

(i) General

Filter fabric shall meet the requirements of PART 2 PRODUCTS, paragraph FILTER FABRIC.

Filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of 0 degrees F to 120 degrees F.

If wooden stakes are utilized for silt fence construction, they shall have a minimum diameter of 2 inches when oak is used and 4 inches when pine is used. Wooden stakes shall have a minimum length of 5 feet.

If steel posts (standard "U" or "T" section) are utilized for silt fence construction, they shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 5 feet.

Wire fence reinforcement for silt fences using standard strength filter fabric shall be a minimum of 14 gauge and shall have a maximum mesh spacing of 6 inches.

(ii) Installation

The height of a silt fence shall be a minimum of 16 inches above the ground surface and shall not exceed 34 inches above the ground surface.

The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, filter fabric shall be spliced together only at a support post with a minimum 6 inch lap and securely sealed.

A trench shall be excavated approximately 4 inches wide and 4 inches deep on the upslope side of the proposed location of the measure.

When wire support is used, standard-strength filter fabric may be used. Posts for this type of installation shall be placed a maximum of 10 feet apart. The wire mesh fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1 inch long, tie wires or hog rings. The wire shall extend into the trench a minimum of 2 inches and shall not extend more than 34 inches above the ground surface. The standard strength fabric shall be stapled or wired to the wire fence, and 8 inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.

When wire support is not used, extra-strength filter fabric shall be used. Posts for this type of fabric shall be placed a maximum of 6 feet apart. The filter fabric shall be fastened securely to the upslope side of the posts using 1 inch long (minimum) heavy-duty wire staples or tie wires and 8 inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.

The 4 inch by 4 inch trench shall be backfilled and the soil compacted over the filter fabric.

Silt fences shall be removed upon approval by the Contracting Officer.

(2) Straw Bales.

Bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another. Bale rows used to retain sediment shall be turned uphill at each end of each row.

All bales shall be either wire-bound or string-tied. Straw bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales in order to prevent deterioration of the bindings.

The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. After the bales are staked and chinked (gaps filled by wedging), the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to 4 inches against the uphill side of the barrier.

Each bale shall be securely anchored by at least two stakes (minimum dimensions 2 inches x 2 inches x 36 inches) or standard "T" or "U" steel posts (minimum weight of 1.33 pounds per linear foot) driven through the bale. The first stake or steel post in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or steel pickets shall be driven a minimum 18 inches deep into the ground to securely anchor the bales.

The gaps between bales shall be chinked (filled by wedging) with straw to prevent water from escaping between the bales. Loose straw may be scattered over the area immediately uphill from a straw bale barrier to increase barrier efficiency.

Straw bale barriers shall be removed upon approval by the Contracting Officer.

(3) Temporary Diversion Dikes

Temporary diversion dikes shall have a maximum channel slope of 2 percent and shall be adequately compacted to prevent failure. The minimum height measured from the top of the dike to the bottom of the channel shall be 18 inches. The minimum base width shall be 6 feet and the minimum top width shall be 2 feet. Temporary diversion dikes shall be located to minimize damages caused by construction operations and traffic.

(4) Sedimentation Basins

General: For drainage areas that serve an area of 10 acres or greater, a temporary sedimentation basin will be provided until final stabilization is achieved. The sediment basin should provide at least 3,600 cubic feet of storage per acre drained.

The contractor shall submit his plans for the location, construction, operation, and maintenance of the temporary sedimentation basin along with the necessary calculations for the outfall structure for review at the time of the pre-construction meeting.

Installation: The sedimentation basin will be installed prior to major site grading. The outlet structure for the sediment basin shall withdraw water from the surface and will be designed for the 2-year, 24 hour storm event.

Due to the linear nature of the project, sediment basins will not be used due to the narrow ROW and the lack of a common drainage area serving 10 or more acres.

(5) Rock Check Dam

General: A small temporary dam constructed across a swale or ditch to slow the velocity of water to reduce erosion and off-site transport

Installation: Check dams should be constructed of stones. Silt fence material is acceptable for use as check dams. The check dam should be no higher than 2 feet with the center of the check dam a minimum of 6 inches lower than the outer edges of the check dam.

The complete width of the swale or the drainage ditch should be covered with the check dam such that run-off will not flow around the edges of the check dam. Subsequent check dams should be placed so that the center of the next check dam is the same elevation as the bottom of the previous dam immediately upstream.

(6) Floating Turbidity Barrier

Floating turbidity barriers will not be used with the project because no construction work is to occur within a waterbody.

c. Device Applicability

(1) Straw bales, silt fences, earth dikes, and drainage swales for diversion of runoff upstream from work areas.

(2) Straw bales, silt fences and earth dikes for retention of flow in drains.

(3) Stone outlet protection at culverts.

(4) Sediment containment by providing straw bales or silt fences along the toe of fill and cut slopes.

(5) Earth dikes for temporary sediment basins in major drainage channels downstream from work areas.

Structural practices shall be properly placed to effectively retain sediment immediately after completing each phase of work (e.g. clearing and grubbing, excavation, embankment construction, and grading) in each independent runoff area (e.g. after clearing and grubbing in an area between a ridge and drain). Structural practices shall be placed, and as work progresses, removed/replaced/relocated as needed for work to progress in each runoff area. Structural practices, to the extent necessary to prevent sediment from accumulating in existing drainage ditches, leaving the contract rights-of-way, or entering the Yazoo River, shall be implemented as follows:

(1) Along the downhill perimeter edge of disturbed areas.

(2) Along the top of the slope or top bank of drainage ditches, channels, swales, etc. that traverse disturbed areas.

(3) Along the toe of cut slopes and fill slopes of the construction areas.

(4) Perpendicular to the flow in the bottom of existing drainage ditches, channels, swales, etc. that traverse disturbed areas or carry runoff from disturbed areas. Rows of straw bales or silt fences shall be spaced a maximum of 100 feet apart in such existing drains that are within the limits of the work.

(5) Perpendicular to the flow in the bottom of new drainage ditches, channels, and swales. Rows of straw bales or silt fences shall be spaced a maximum of 200 feet apart in drains with slopes equal to or less than 5 percent and 100 feet apart in drains with slopes steeper than 5 percent.

(6) At the entrance to culverts that receive runoff from disturbed areas.

1.5.2 Storm Water Management

1.5.2.1 Management Practices

The storm water management practices that shall be permanently installed under this contract are as follows:

a. Establishment of new turf.
b. Erosion control.

1.5.2.2 Methods

a. Establishment of new turf shall be in accordance with Section 32 92 06.00 09 EXISTING TURF MAINTENANCE AND NEW TURF ESTABLISHMENT.

b. Erosion control shall be in accordance with Section 31 25 00.00 09 EROSION CONTROL.

1.5.3 Other Controls

1.5.3.1 Waste Disposal

No solid materials, including building materials, shall be discharged to waters of the United States, except as authorized by a Section 404 permit. Other requirements are included in Section 01 57 20.00 09 ENVIRONMENTAL PROTECTION.

1.5.3.2 Off-site Vehicle Tracking

Off-site vehicle tracking of sediments shall be minimized. Implement track-out controls as necessary to ensure that sediment removal occurs prior to vehicle exit. Where sediment has been tracked-out from the site onto paved roads, sidewalks, or other paved areas outside the site, remove deposited sediment "immediately" by the end of the next workday. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by similarly effective means of sediment removal. Hosing or sweeping track-out sediment into any stormwater conveyance, storm drain inlet, of Waters of the State is prohibited.

1.5.3.3 Compliance with Regulations

The Contractor shall ensure and demonstrate compliance with applicable State or local waste disposal, sanitary sewer or septic system regulations.

PART 2 PRODUCTS

2.1 FILTER FABRIC FOR SILT SCREEN FENCE

The geotextile, as defined by ASTM D 4439, shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistance to deterioration due to ultraviolet and heat exposure. The geotextile shall

conform to the physical property requirements in paragraph ACCEPTANCE REQUIREMENTS, subparagraph TESTING.

2.2 ACCEPTANCE REQUIREMENTS

2.2.1 General

All brands of geotextile to be used will be accepted on the following basis.

2.2.2 Mill Certificates or Affidavits

The mill certificate or affidavit shall attest that the filter fabric and factory seams meet chemical, physical, and manufacturing requirements specified. The mill certificate of affidavit shall specify the actual Minimum Average Roll Values and shall identify the fabric supplied by roll identification numbers.

2.2.3 Testing

If requested by the Contracting Officer, Government personnel shall collect filter fabric samples in accordance with ASTM D 4354 for testing to determine compliance with any or all of the requirements specified pursuant to ASTM D 4759 and the following table:

EXTRA STRENGTH FILTER FABRIC FOR SILT SCREEN FENCE

PHYSICAL PROPERTY	TEST PROCEDURE	REQUIREMENTS
Grab Tensile Strength	ASTM D 4632	100 lbs. min.
Elongation (%)	ASTM D 4632	30 % max.
Trapezoid Tear	ASTM D 4533	55 lbs. min.
Permittivity	ASTM D 4491	0.2 sec-1 min.
AOS (U.S. Std Sieve)	ASTM D 4751	20-100

NOTE: Standard strength filter fabric for silt screen fence shall meet the same minimum requirements for AOS and Permittivity as the extra strength filter fabric, but may have lower strengths for the remaining properties listed in the table.

2.3 IDENTIFICATION, STORAGE AND HANDLING

Filter fabric shall be identified, stored and handled in accordance with ASTM D 4873.

PART 3 EXECUTION

3.1 MAINTENANCE

The Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. The following procedures shall be followed

to maintain the protective measures identified in the SWPP Plan.

a. Silt Fences

Silt fences shall be inspected in accordance with paragraph INSPECTIONS. Any required repairs shall be made promptly. Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting. Should the fabric on a silt fence decompose or become ineffective, and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits shall be removed when deposits reach one-third of the height of the barrier or a maximum height of 9 inches. When a silt fence is no longer required, it shall be removed. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be seeded in accordance with Section 32 92 06.00 09 EXISTING TURF MAINTENANCE AND NEW TURF ESTABLISHMENT, paragraph SEEDING, except that the coverage requirements in paragraph ESTABLISHMENT do not apply to these areas.

b. Straw Wattles

Straw wattle barriers shall be inspected in accordance with paragraph INSPECTIONS. Close attention shall be paid to the repair of damaged wattles, end runs and undercutting beneath bales. Necessary repairs to barriers or replacement of wattles shall be accomplished promptly. Sediment deposits shall be removed when deposits reach one-half of the height of the barrier. When a straw wattle barrier is no longer required, it shall be removed. The immediate area occupied by the wattle and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be seeded in accordance with Section 32 92 06.00 09 EXISTING TURF MAINTENANCE AND NEW TURF ESTABLISHMENT, paragraph SEEDING, except that the coverage requirements in paragraph ESTABLISHMENT do not apply to these areas.

c. Temporary Diversion Dikes

Temporary diversion dikes shall be inspected in accordance with paragraph INSPECTIONS. Close attention shall be paid to the repair of damaged temporary diversion dikes and necessary repairs shall be accomplished promptly. When temporary diversion dikes are no longer required, they shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be seeded in accordance with Section 32 92 06.00 09 EXISTING TURF MAINTENANCE AND NEW TURF ESTABLISHMENT, paragraph SEEDING, except that the coverage requirements in paragraph ESTABLISHMENT do not apply to these areas.

d. .

3.2 INSPECTIONS

3.2.1 General

Disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that have not been finally stabilized, stabilization practices, structural practices, other controls, and areas where vehicles exit the site shall be inspected by the Contractor at least weekly for a minimum of four inspections per each month; and as often as necessary to ensure that appropriate erosion and sediment controls have been properly constructed and maintained, and to

determine if additional or alternative control measures are required. The Contractor shall perform a "walk through" inspection of the construction site before anticipated storm events. Where sites have been finally stabilized, such inspection shall be conducted at least once every month.

3.2.2 Field Inspections

Disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPP Plan shall be observed to ensure that they are operating correctly. Discharge locations or points shall be inspected to ascertain whether storm water pollution prevention measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.

3.2.3 Inspection Reports

For each inspection conducted, the Contractor shall complete a Inspection and Certification Form for Erosion and Sediment Controls. The report shall be signed by the Contractor. The report shall be furnished to the Contracting Officer within 24 hours of the inspection as a part of the Contractor's daily CQC REPORT. A complete log of the inspections shall be maintained on the job site and become a part of the SWPP Plan.

3.2.4 Revisions to the SWPP Plan

Based on the results of the inspection and immediately after the inspection, the Contractor shall provide to the Contracting Officer any recommended changes to the SWPP Plan. The Contracting Officer will approve or disapprove the proposed changes within seven (7) calendar days after receipt. Changes to the SWPP Plan shall be implemented within seven (7) calendar days following approval.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 31 - EARTHWORK

SECTION 31 11 00.00 09

CLEARING AND GRUBBING

-- End of Section Table of Contents --

SECTION 31 11 00.00 09

CLEARING AND GRUBBING

PART 1 GENERAL (Not Applicable)

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

All clearing and grubbing work, including vegetation removal, for all required excavations and embankment construction shall be completed at least 500 feet in advance of the required work. If regrowth of vegetation or trees occurs after clearing and grubbing and before beginning excavation or placement of fill, the Contractor will be required to clear and grub the area again prior to beginning the work, and no payment will be made for this additional clearing and grubbing.

3.2 CLEARING

3.2.1 General

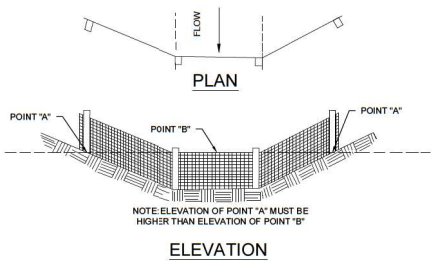
Clearing shall be limited to those areas within the rights-of-way as specified herein. Existing trees and vegetation not required to be cleared shall be preserved to the maximum extent practicable and shall not be damaged. Clearing, unless otherwise specified, shall consist of the complete removal above the ground surface , except as indicated below, of all trees, saplings, stumps, down timber, snags, brush, vegetation, old piling, loose stone, abandoned structures, abandoned fencing, fencing, drift, trash, and similar debris. Growth standing in water in areas which are not drained in accordance with Section 31 24 00.00 09 EMBANKMENT, paragraph DRAINAGE, may be cut off so as not to protrude more than 2 feet above the existing water surface.

3.2.2 Trees

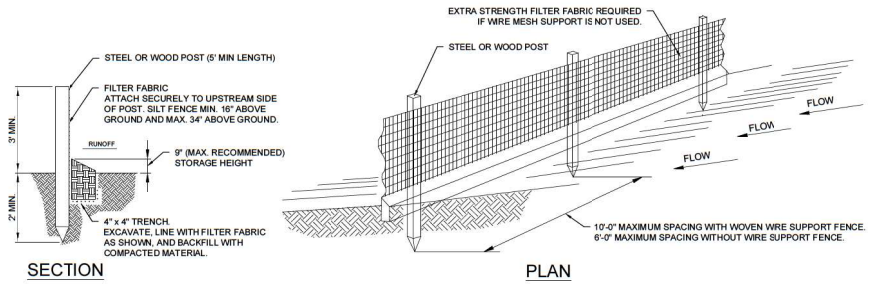
Certain trees, as designated by the Contracting Officer, shall be left standing. Trees shall be felled in such a manner so as to avoid damage to trees to be left standing, to existing structures and installations, and to those under construction, and with due regard for the safety of employees and others.

3.2.3 Vegetation Removal

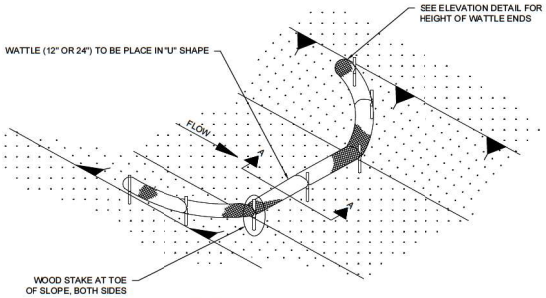
Vegetation to be removed shall consist of crops, grass, bushes and weeds. Close-growing grass and other vegetation shall be removed from areas to receive semicompacted fill to provide a completely bare earth surface immediately prior to beginning foundation preparation. Removal of vegetation from the side of the existing levees shall be limited to 1,000 feet in advance of embankment placement. Acceptance of the vegetation removal operation shall precede the initiation of foundation preparation in the area from which vegetation has been removed. For areas to receive uncompacted fill, grass and other vegetation that is 12 inches in height or less shall be mowed to a height not to exceed 4 inches above the ground

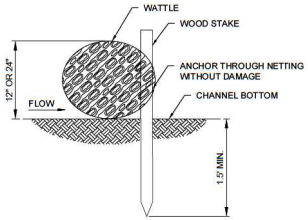


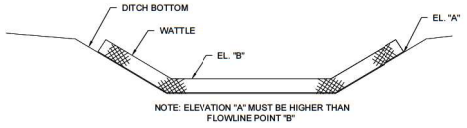
F1 SILT FENCE DITCH PLACEMENT DETAIL
NOT TO SCALE



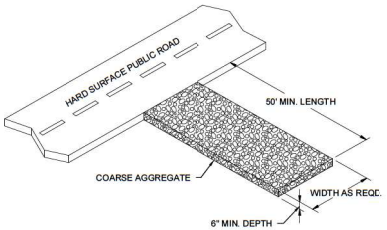
F4 SILT FENCE INSTALLATION DETAILS
NOT TO SCALE







C1 STRAW WATTLE PLACEMENT AND INSTALLATION DETAILS
NOT TO SCALE



A6 CONSTRUCTION ENTRANCE AND EXIT DETAIL
NOT TO SCALE

NOTES

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT SCREEN FENCE SHALL BE PLACED ALONG SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
4. CONTRACTOR SHALL BEGIN EXCAVATION OPERATIONS AT A MINIMUM 10 FOOT OFFSET INSIDE THE BORROW AREA RIGHT OF WAY AS SHOWN.
5. OVERBANK PUMPING IS PROHIBITED. ENCLOSED CONDUITS SHALL BE USED TO PUMP ALL EXCESS WATER FROM THE BORROW AREA AS DEEMED NECESSARY TO APPROVED DISCHARGE LOCATIONS. INLET LINES SHALL ONLY PUMP WATER FROM THE SURFACE OF THE BORROW AREA, AND POINTS OF DISCHARGE SHALL EXTEND AT A MINIMUM OF 20-FEET PERPENDICULAR FROM THE WATER'S EDGE OF THE RECEIVING BODY BELOW THE SURFACE (5' MINIMUM OR BOTTOM) AS TO INHIBIT EROSION. ADDITIONAL EROSION MEASURES SHALL BE UTILIZED AT ANY POINT IN WHICH IMMEDIATE ACTION IS NEEDED TO MAINTAIN EXISTING SOIL STABILITY.
6. THE ENVIRONMENTAL PROTECTION CONTROLS SHOWN IN THE CONTRACT DRAWINGS MAY NOT FULLY ADDRESS ALL CONCERNS AND PERMIT REQUIREMENTS, BUT ARE PROVIDED TO ESTABLISH A MINIMUM LEVEL OF PROTECTION REQUIRED AT ALL TIMES. THE CONTRACTOR SHALL CONSIDER HIS WORK OPERATIONS, METHODS, AND CURRENT SITE CONDITIONS TO DEVELOP A COMPLETE PLAN, INCLUDING ADDITIONAL PROTECTION MEASURES AS REQUIRED, TO ASSURE ADEQUATE PERFORMANCE AND COMPLIANCE WITH ALL CONTRACT DOCUMENTS, REGULATIONS, AND PERMITS. REFERENCE SECTION 01 57 20.00 09 ENVIRONMENTAL PROTECTION AND SECTION 01 57 23.00 09 STORM WATER POLLUTION PREVENTION PLANFOR ADDITIONAL REQUIREMENTS.
7. THE CONTRACTOR SHALL EMPLOY THE USE OF ADDITIONAL EROSION CONTROL BMP MEASURES TO MITIGATE THE DISTURBANCE OF LOCATIONS WHERE CLEARING AND GRUBBING IS TO OCCUR ON THE LANDSIDE TOE OF THE LEVEE.
8. IN THE EVENT THAT ADJACENT RECEIVING WATER BODIES ARE UNAVAILABLE FOR UNWATERING, UNWATERING SHALL BE ADMINISTERED ACCORDING TO ALTERNATIVE BMP PRACTICES APPROVED BY THE CONTRACTING OFFICER AND MDEQ. APPROVED DISCHARGE LOCATIONS ARE NOT DEFINED IN THE PLANS AND SHALL BE COORDINATED WITH THE LANDOWNER AND THE CONTRACTING OFFICER.
9. MINIMUM RECOMMENDED PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECKS IS 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE CONTRACTING OFFICER.
10. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
11. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
12. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

DESIGNED BY: J. HERRINGTON
DRAWN BY: J. MCCOY
CHECKED BY: C. BANKSTON
SUBMITTED BY: L. WALLACE
SIZE: ANSI D

ISSUE DATE: MMM YYYY
SOLICITATION NO.: W912DE-YY-X-XXXX
USACE CONTRACT NO.: W912DE-YY-X-XXXX

BOLIVAR COUNTY, MISSISSIPPI
FCMR&T, EAST MAINTENANCE RIVER LEVEES
SETBACK REMEDIATION
DEESON, ITEM 611-L

TYPICAL DETAILS
STORM WATER POLLUTION PREVENTION PLAN

SHEET ID
C-501

INTERMEDIATE BACKCHECK DQC REVIEW

A1 PLAN; STA. 460+00 TO 498+00
SCALE: 1"=200'

0 200' 400'

NOTES

1. HORIZONTAL DATUM IS NAD83/HARN, SPCS, MS WEST. VERTICAL DATUM IS NAVD88.
2. ALL UNITS ARE U.S. SURVEY FOOT.
3. AERIAL IMAGE PROVIDED BY BING MAPS. DATE OF CAPTURE IS UNKNOWN.
4. ROW LAYOUT INFORMATION IS SHOWN ON SHEETS R-101 - R-601.
5. CPT DATA IS AVAILABLE UPON REQUEST.
6. SILT FENCE WILL BE CONSISTENT WITH ROW.
7. SEE SHEET CU-001 FOR DESCRIPTIONS TO UTILITY CALL OUTS.
8. FOR CLARIFICATION ON THE DENOTATION OF THE CENTERLINE:
   - 8.1. STA.XXX+XX- REGULAR MRL STATIONING
   - 8.2. STA.aXXX+XX FIRST STATION EQUATION
   - 8.3. STA.bXXX+XX SECOND STAION EQUATION

LEGEND

- RIGHT OF WAY LIMITS
- BASELINE
- CONE PENETROMETER TEST
- FOUNDATION BORING
- BORROW BORING

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

DESIGNED BY: J. HERRINGTON
DRAWN BY:
CHECKED BY: J. MCCLELLAND
CHECKED BY: C. BANKSTON
SUBMITTED BY: D. WALLACE
SIZE: ANSI D

ISSUE DATE: MMM YYYY
SOLICITATION NO.: W912EE-YY-X-XXXX
PROJECT NO.XXXX
CONTRACT NO. W912EE-YY-X-XXXX

BOLIVAR COUNTY, MISSISIPPI
FCMRS1; EASTSIDE MISSISSIPPI RIVER LEVEES
SEEPAGE REMEDIATION
DEESON, ITEM 611-L

PLAN
STA. 460+00 TO 498+00
SHEET 1 OF 6

SHEET ID
C-101

INTERMEDIATE BACKCHECK DQC REVIEW

A1 PLAN; STA. 498+00 TO 542+00
SCALE: 1"=200'

0 200' 400'

NOTES

1. HORIZONTAL DATUM IS NAD83/HARN, SPCS, MS WEST. VERTICAL DATUM IS NAVD88.
2. ALL UNITS ARE U.S. SURVEY FOOT.
3. AERIAL IMAGE PROVIDED BY BING MAPS. DATE OF CAPTURE IS UNKNOWN.
4. ROW LAYOUT INFORMATION IS SHOWN ON SHEETS R-101 - R-601.
5. CPT DATA IS AVAILABLE UPON REQUEST.
6. SILT FENCE WILL BE CONSISTENT WITH ROW.
7. SEE SHEET CU-001 FOR DESCRIPTIONS TO UTILITY CALL OUTS.
8. FOR CLARIFICATION ON THE DENOTATION OF THE CENTERLINE:
   - 8.1. STA.XXX+XX- REGULAR MRL STATIONING
   - 8.2. STA.aXXX+XX FIRST STATION EQUATION
   - 8.3. STA.bXXX+XX SECOND STAION EQUATION

LEGEND

- RIGHT OF WAY LIMITS
- BASELINE
- CONE PENETROMETER TEST
- FOUNDATION BORING
- BORROW BORING

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HERRINGTON
DRAWN BY: J. MCCLELLAN
CHECKED BY: C. BANKSTON
SUBMITTED BY: D. WALLACE
SIZE: ANSI D
ISSUE DATE: MMM YYYY
SOLICITATION NO.: W912EE-YY-X-XXXX
PROJECT NO.: W912EE-YY-X-XXXX

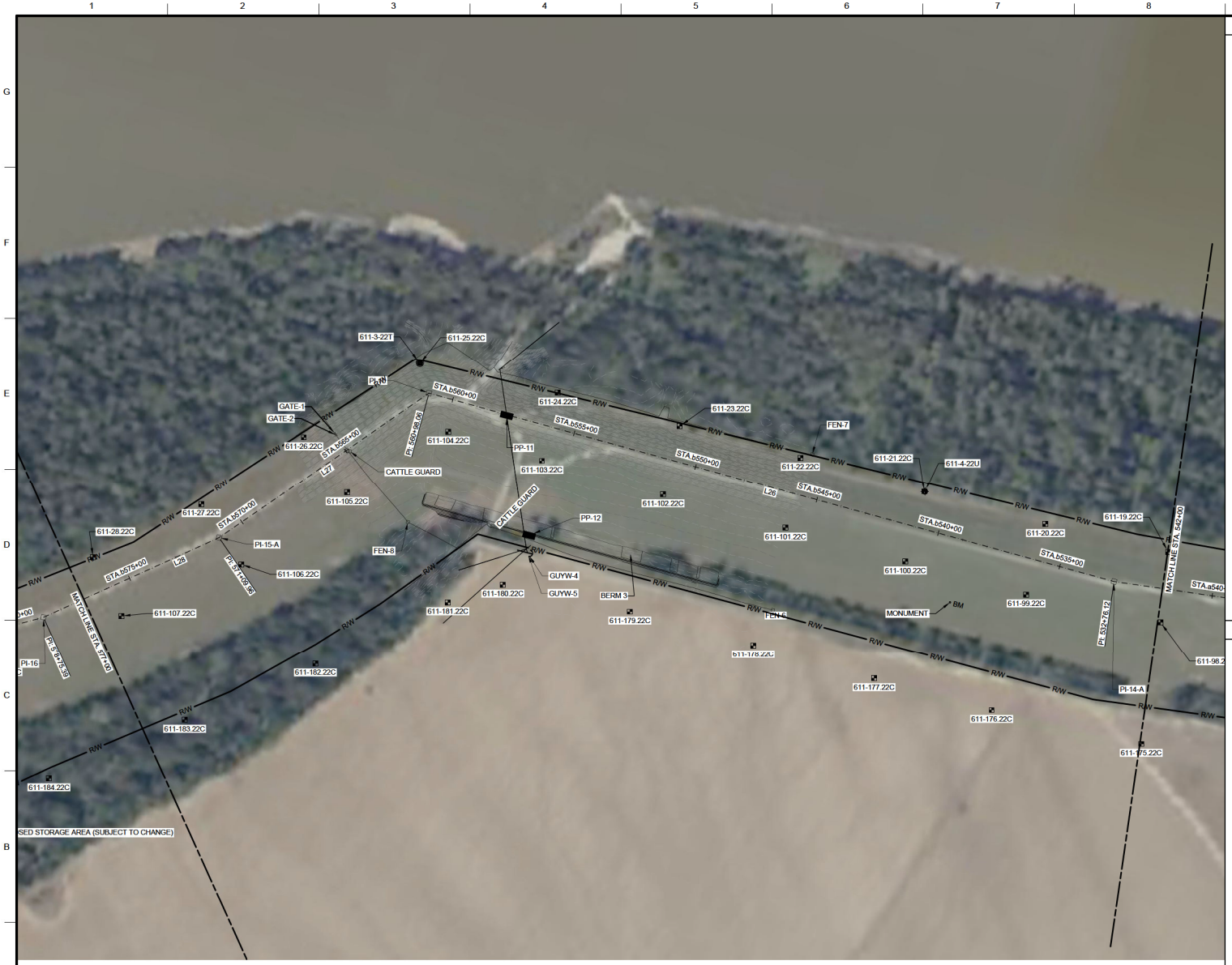
U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

BOLIVAR COUNTY, MISSISSIPPI
FCMRS1, EASTSIDE MISSISSIPPI RIVER LEVEES
SEEPAGE REMEDIATION
DEESON, ITEM 611-L

PLAN
STA. 498+00 TO 542+00
SHEET 7 OF 6

SHEET ID
C-102

INTERMEDIATE BACKCHECK DQC REVIEW



A1 PLAN; STA. 542+00 TO 575+00
SCALE: 1"=200'

NOTES

1. HORIZONTAL DATUM IS NAD83/HARN, SPCS, MS WEST. VERTICAL DATUM IS NAVD88.
2. ALL UNITS ARE U.S. SURVEY FOOT.
3. AERIAL IMAGE PROVIDED BY BING MAPS. DATE OF CAPTURE IS UNKNOWN.
4. ROW LAYOUT INFORMATION IS SHOWN ON SHEETS R-101 - R-601.
5. CPT DATA IS AVAILABLE UPON REQUEST.
6. SILT FENCE WILL BE CONSISTENT WITH ROW.
7. SEE SHEET CU-001 FOR DESCRIPTIONS TO UTILITY CALL OUTS.
8. FOR CLARIFICATION ON THE DENOTATION OF THE CENTERLINE:
   - 8.1. STA.XXX+XX- REGULAR MRL STATIONING
   - 8.2. STA.aXXX+XX FIRST STATION EQUATION
   - 8.3. STA.bXXX+XX SECOND STAION EQUATION

LEGEND

- RIGHT OF WAY LIMITS
- BASELINE
- CONE PENETROMETER TEST
- FOUNDATION BORING
- BORROW BORING

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HERRINGTON
DRAWN BY:
CHECKED BY: J. MCCLELLAND
QC CHECKED BY: C. BANKSTON
SUBMITTED BY:
SIZE: ANSI D

SSE EDITE: MMM YYYY
SOLICITATION NO.: W912EE-YY-XX-XXXX
PROJECT NO.: W912EE-YY-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

BOLIVAR COUNTY, MISSISSIPPI
FCMRS1; EAST BANK MISSISSIPPI RIVER LEVEES
SEEPAGE REMEDIATION
DEESON, ITEM 611-L
PLAN
STA. 542+00 TO 575+00
SHEET 3 OF 6

SHEET ID
C-103

INTERMEDIATE BACKCHECK DQC REVIEW

A1 PLAN; STA. 575+00 TO 619+00

SCALE: 1"=200'

0 200' 400'

NOTES

1. HORIZONTAL DATUM IS NAD83/HARN, SPCS, MS WEST. VERTICAL DATUM IS NAVD88.
2. ALL UNITS ARE U.S. SURVEY FOOT.
3. AERIAL IMAGE PROVIDED BY BING MAPS. DATE OF CAPTURE IS UNKNOWN.
4. ROW LAYOUT INFORMATION IS SHOWN ON SHEETS R-101 - R-601.
5. CPT DATA IS AVAILABLE UPON REQUEST.
6. SILT FENCE WILL BE CONSISTENT WITH ROW.
7. SEE SHEET CU-001 FOR DESCRIPTIONS TO UTILITY CALL OUTS.
8. FOR CLARIFICATION ON THE DENOTATION OF THE CENTERLINE:
   - 8.1. STA.XXX+XX- REGULAR MRL STATIONING
   - 8.2. STA.aXXX+XX FIRST STATION EQUATION
   - 8.3. STA.bXXX+XX SECOND STAION EQUATION

LEGEND

- RIGHT OF WAY LIMITS
- BASELINE
- CONE PENETROMETER TEST
- FOUNDATION BORING
- BORROW BORING

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HERRINGTON
DRAWN BY:
CHECKED BY:
QA/QC BY:
SUBMITTED BY:
SIZE: ANSI D

SSE-EDITE:
MMM YYYY
SOLICITATION NO.:
W912EE-YY-X-XXXX
PROJECT NO.:
W912EE-YY-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

BOLIVAR COUNTY, MISSISSIPPI
FCMRS1; EASTSIDE MISSISSIPPI RIVER LEVEES
SEEPAGE REMEDIATION
DEESON, ITEM 611-L

PLAN
STA. 575+00 TO 619+00
SHEET 1 OF 6

SHEET ID
C-104

INTERMEDIATE BACKCHECK DQC REVIEW

A1 PLAN; STA. 619+00 TO 661+00

SCALE: 1"=200'

0 200' 400'

NOTES

1. HORIZONTAL DATUM IS NAD83/HARN, SPCS, MS WEST. VERTICAL DATUM IS NAVD88.
2. ALL UNITS ARE U.S. SURVEY FOOT.
3. AERIAL IMAGE PROVIDED BY BING MAPS. DATE OF CAPTURE IS UNKNOWN.
4. ROW LAYOUT INFORMATION IS SHOWN ON SHEETS R-101 - R-601.
5. CPT DATA IS AVAILABLE UPON REQUEST.
6. SILT FENCE WILL BE CONSISTENT WITH ROW.
7. SEE SHEET CU-001 FOR DESCRIPTIONS TO UTILITY CALL OUTS.
8. FOR CLARIFICATION ON THE DENOTATION OF THE CENTERLINE:
   - 8.1. STA.XXX+XX- REGULAR MRL STATIONING
   - 8.2. STA.aXXX+XX FIRST STATION EQUATION
   - 8.3. STA.bXXX+XX SECOND STAION EQUATION

LEGEND

- RIGHT OF WAY LIMITS
- BASELINE
- CONE PENETROMETER TEST
- FOUNDATION BORING
- BORROW BORING

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY:	J. HERRINGTON
DRAWN BY:	J. MCCLELLAND
CHECKED BY:	C. BANKSTON
SUBMITTED BY:	D. WALLACE
SIZE:	ANSI D
SSE EDITE:	MMM YYYY
SOLICITATION NO.:	W912EE-YY-XXXX
CONTRACT NO.:	W912EE-YY-C-XXXX
PROJECT NO.:	W912EE-YY-X-XXXX

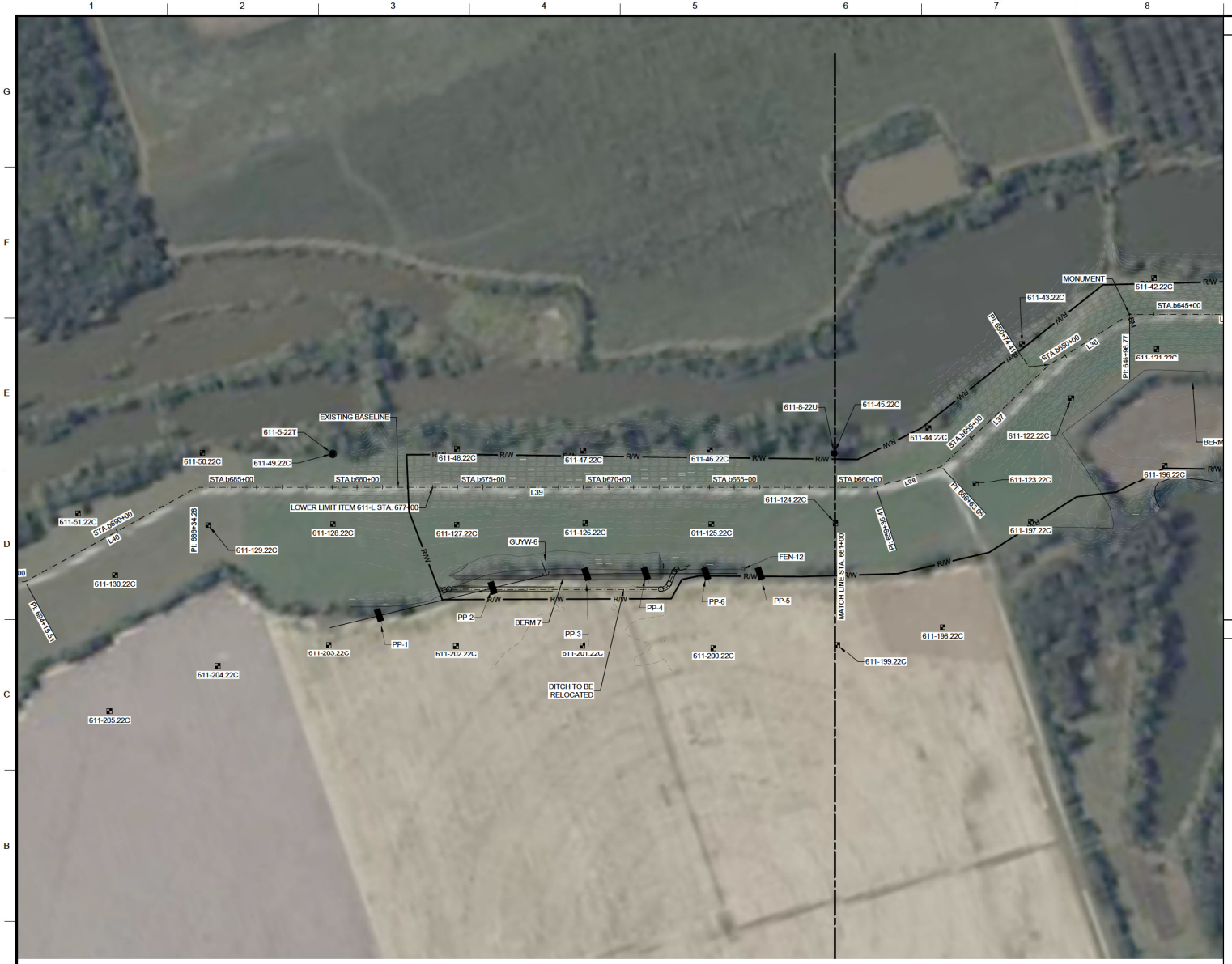
U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

BOLIVAR COUNTY, MISSISSIPPI
FCMRS1: EASTMAN-WINSTONVILLE LEVEES
SEEPAGE REMEDIATION
DEESON, ITEM 611-L

PLAN
STA. 619+00 TO 661+00
SHEET 5 OF 6

SHEET ID
C-105

INTERMEDIATE BACKCHECK DQC REVIEW



A1 PLAN; STA. 661+00 TO 680+00

SCALE: 1"=200'

0 200' 400'

NOTES

1. HORIZONTAL DATUM IS NAD83/HARN, SPCS, MS WEST. VERTICAL DATUM IS NAVD88.
2. ALL UNITS ARE U.S. SURVEY FOOT.
3. AERIAL IMAGE PROVIDED BY BING MAPS. DATE OF CAPTURE IS UNKNOWN.
4. ROW LAYOUT INFORMATION IS SHOWN ON SHEETS R-101 - R-601.
5. CPT DATA IS AVAILABLE UPON REQUEST.
6. SILT FENCE WILL BE CONSISTENT WITH ROW.
7. SEE SHEET CU-001 FOR DESCRIPTIONS TO UTILITY CALL OUTS.
8. FOR CLARIFICATION ON THE DENOTATION OF THE CENTERLINE:
   - 8.1. STA.XXX+XX- REGULAR MRL STATIONING
   - 8.2. STA.aXXX+XX FIRST STATION EQUATION
   - 8.3. STA.bXXX+XX SECOND STAION EQUATION

LEGEND

- RIGHT OF WAY LIMITS
- BASELINE
- CONE PENETROMETER TEST
- FOUNDATION BORING
- BORROW BORING

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HERRINGTON
DRAWN BY: J. MCCLELLAND
CHECKED BY: C. BANKSTON
SUBMITTED BY: D. WALLACE
SIZE: ANSI D
SSE DATE: MMM YYYY
SOLICITATION NO.: W912EE-YY-X-XXXX
PROJECT NO.: W912EE-YY-X-XXXX

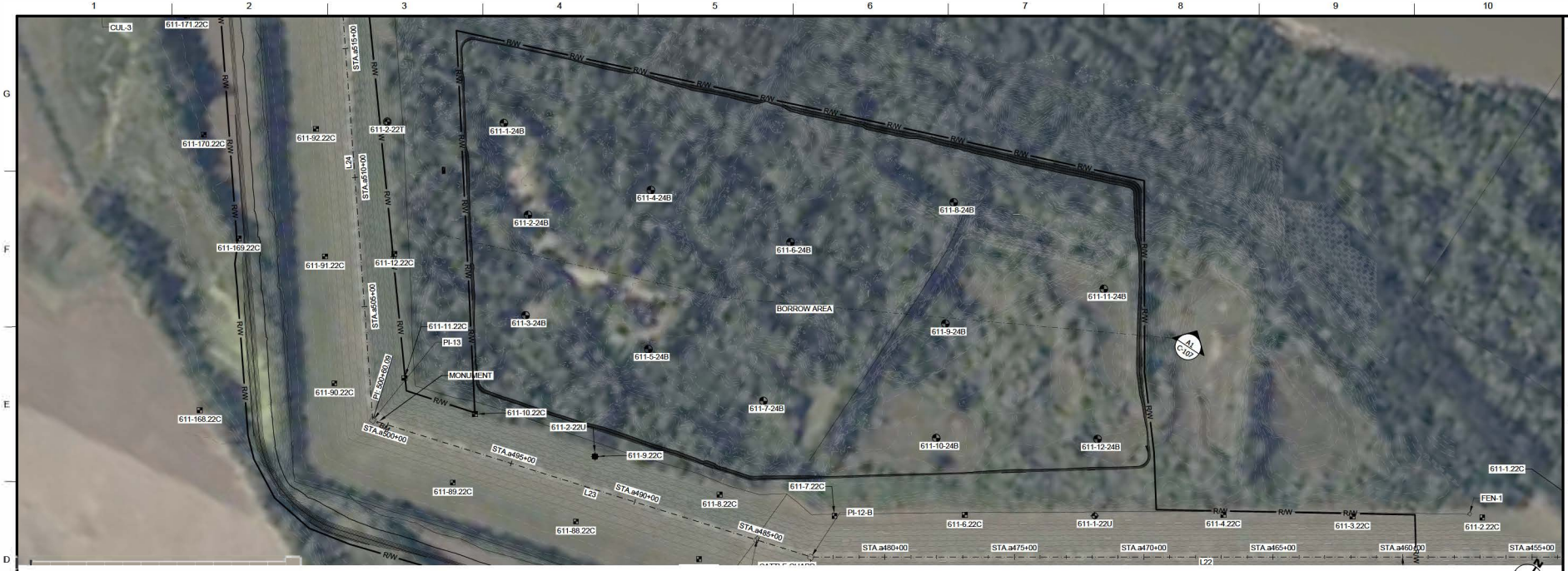
U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

BOLIVAR COUNTY, MISSISSIPPI
FC/MR&T, EAST SIDE MISSISSIPPI RIVER LEVEES
SEEPAGE REMEDIATION
DEESON, ITEM 611-L

PLAN
STA. 661+00 TO 680+00
SHEET 6 OF 6

SHEET ID
C-106

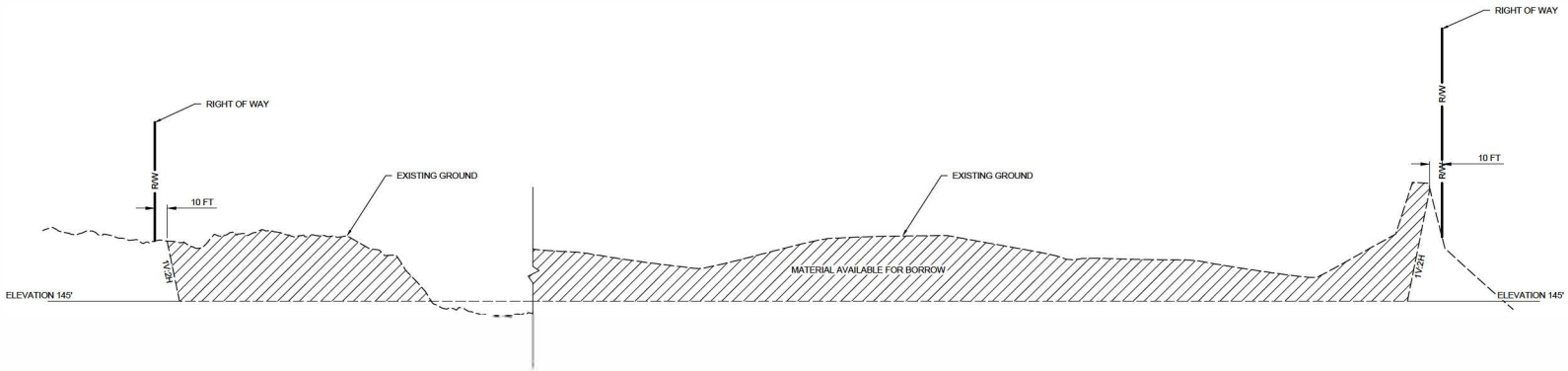
INTERMEDIATE BACKCHECK DQC REVIEW



D1 BORROW AREA PLAN

SCALE: 1"=100'

0 200' 400'



A1 BORROW AREA TYPICAL DETAIL

NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HERRINGTON
DRAWN BY: J. MCCURLEY
CHECKED BY: C. BANKSTON
SUBMITTED BY: D. WALLACE
SIZE: ANSI D

ISSUE DATE: MMMM YYYY
SOLICITATION NO.: W912EE-YY-X-XXXX
CONTRACT NO.: W912EE-YY-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

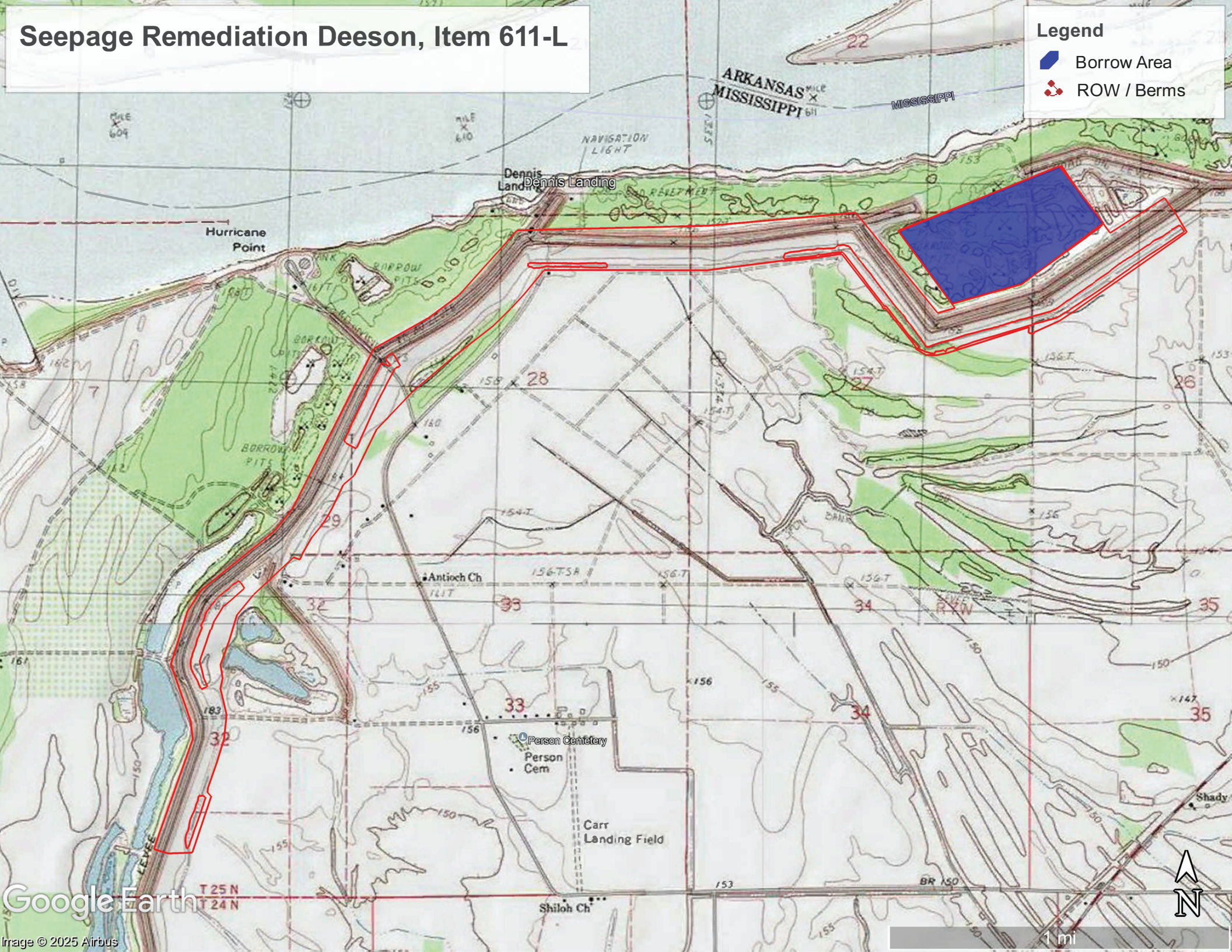
BOLIVAR COUNTY, MISSISSIPPI
FCMRS1, EAST SIDE MAIN STEM LEVEES
SEEPAGE REMEDIATION
DEESON, ITEM 611-L

PLAN AND SECTION
BORROW AREA

SHEET ID
C-107

INTERMEDIATE BACKCHECK DQC REVIEW

Seepage Remediation Deeson, Item 611-L



Order of Work

Mississippi River Levee Deeson, MS
Item 611-L Seepage Berms

Large Construction Notice of Intent

1.11 ORDER OF WORK

The work shall be carried on in accordance with the Work Schedule Diagram and Progress Chart (schedule) required by paragraph (a) of the Contract Clause SCHEDULES FOR CONSTRUCTION CONTRACTS. In preparing the Work Schedule Diagram and Progress Chart (schedule), the Contractor shall adhere to the following order of work:

a. Construction of required berm embankment shall begin at Sta. 68+00 and proceed continuously downstream until embankment construction is completed to Sta. 300+00. Embankment construction, including vegetation removal of the levee surface, shall not be performed more

than 5,000 feet in advance of the beginning station until a section of embankment is complete, and shall not be performed more than 5,000 feet in advance of the completed embankment.

b. Construction borrow area shall be excavated beginning upstream and continuing downstream to the permissible depths and to the full riverside limits shown on the drawings.

c. Existing gravel and cattle guards shall not be removed until embankment construction reaches the approximate elevation of the adjacent existing levee crown. No more than 5,000 feet of levee crown shall be without surfacing, either new or existing, at any time. Existing gravel surfacing material shall be removed from each ramp and stockpiled immediately before embankment is placed on each ramp.

d. Ramps shall be constructed concurrently with adjacent levee embankment construction.

e. Existing levee gravel shall be removed from the stockpile and placed on the new levee crown after each reach of levee embankment has been completed, and before levee embankment has been completed more than 2,000 feet in advance of the reach that has already received existing gravel.

f. New surfacing material shall be placed on completed embankment so that the completed new surfacing shall be no less than 3,000 feet and no more than 5,000 feet behind the completion of the levee embankment. New cattle guards and bedding beams shall be installed after placement of new surfacing material so that new surfacing material is not hauled over the new cattle guards.

g. The existing levee crown shall not be used as a haul road until existing gravel has been removed as required in Section 32 15 00.00 09 LEVEE SURFACING. Completed levee embankment (with or without surfacing material) shall not be used as a haul road.

1.12 WORK SCHEDULE DIAGRAM AND PROGRESS CHART

e Contractor shall furnish a Work Schedule Diagram to the Contracting Officer as described below.

a. Work Schedule Diagram

(1) The progress chart required by provisions of paragraph (a) of the Contract Clause SCHEDULES FOR CONSTRUCTION CONTRACTS, shall be prepared in the form of a Work Schedule Diagram. FIVE (5) COPIES OF THE WORK SCHEDULE DIAGRAM WILL BE REQUIRED. The use of a computer is at the Contractor's option.

(2) The Work Schedule Diagram shall be in either the I-J or Precedent Diagramming method. The diagram shall show the order and interdependence of activities and the sequence in which the work is to be accomplished. The diagram shall include, in addition to construction activities, the submittal and approval of materials, samples and shop drawings, the procurement of all materials and equipment, and preparatory and initial quality control inspections. All activities of the Government that affect progress and contract required dates for completion of all or part of the work shall be shown. No activity with a duration of more

than thirty (30) calendar days will be allowed. The diagram shall be drafted to show a continuous flow from left to right with no flow from right to left. The following information shall be shown on the diagram for each activity: preceding and following event numbers, description, estimated cost, and duration of calendar days. Numbering shall be assigned so that preceding event numbers are smaller numerically than the following event numbers. Skip-numbering should be used on the network to allow addition of subsequent activities for change order and logic changes. The submittal of the diagram shall include a listing of standard abbreviations used by the Contractor.

(3) The diagram shall be submitted in time to be received by the Government seven (7) days prior to the scheduled Preconstruction Conference. The diagram will be used to determine Contractor's progress on the project. The Contractor shall at least monthly or with each pay estimate submit actual progress and remaining duration on each activity, which will be agreed to by the Contracting Officer. If there are no changes on the diagram logic, the Contractor may submit these updates in a narrative form. If any changes are made to the diagram logic, the Contractor shall submit a revised work schedule diagram along with a narrative explaining those logic changes. Five (5) copies of any revised diagrams will be required.

b. Progress Chart - The progress chart required by provisions of paragraph (a) of the Contract Clause SCHEDULE FOR CONSTRUCTION CONTRACTS shall be prepared on ENG FORM 2454, copies of which will be furnished to the Contractor by the Government. FIVE (5) COPIES OF THE SCHEDULE WILL BE REQUIRED. The Progress Chart shall be periodically updated. The updates shall be as directed by the Contracting Officer and as stated in paragraph "(a)(3)" above.

ENCLOSURE 4. WATER QUALITY CERTIFICATION LETTER

Mississippi River Levee Deeson, MS
Item 611-L Seepage Berms

Large Construction Notice of Intent

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
James I. Palmer, Jr., Executive Director

November 30, 1998

Colonel Robert Crear, District Engineer
U. S. Army Corps of Engineers, Vicksburg District
4155 Clay Street
Vicksburg, Mississippi 39180-3435

Dear Colonel Crear:

Pursuant to Section 401 of the Federal Water Pollution Control Act (33 U.S.C. 1251, 1341), the Office of Pollution Control issues this Certification, after public notice and opportunity for public hearing, to the Department of the Army, Vicksburg District, Corps of Engineers, an applicant for a Federal license or permit to conduct the following activity:

Department of the Army, Vicksburg District, Cops of Engineers: Proposed Mississippi River Mainline Levees Enlargement and Seepage Control Feature, Mississippi River and Tributaries Project. The applicant will implement the recommended plan (Plan 4) to conduct levee enlargements and seepage control measures to provide protection against a project design flood (PDF) along the Mississippi River from Cape Girardeau, Missouri to the Gulf of Mexico.

In Mississippi, the recommended plan includes 40 work items calling for approximately 33 miles of seepage control, and 69 miles of levee enlargement. Water quality certification has previously been issued for approximately 18 miles of levee enlargement and eight miles of seepage control for this project. The recommended plan includes the construction of approximately 6,727 acres of borrow areas, along the entire project length, designed to improve aquatic habitat, fishing and waterfowl values and the reforestation of approximately 3,041 acres of borrow areas to provide wetland functional values and wildlife habitat.

The project will impact 3,154 acres of wetlands in Mississippi, including 1,493acres of forested wetlands, 925 acres of farmed wetlands, 13 acres of sandbar and 723 acres of open water. Significant unavoidable environmental losses in Mississippi will be compensated for by the acquisition and reforestation

of approximately 2,187 acres of frequently flooded agricultural lands. The project is located along the Mississippi River in Desoto, Tunica, Coahoma, Bolivar, Washington, Issaquena and Warren Counties, Mississippi (OPC98-145).

Pursuant to Section 401 of the Federal Clean Water Act and 40 C.F.R. Section 121.2(a), the Office of Pollution Control certifies that there is a reasonable assurance that the applicant's above-described activity will not violate the applicable provisions of Sections 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act and Section 49-17-29 of the Mississippi Code of 1972, if the applicant complies with the following conditions:

1. The project shall be implemented as proposed in the Recommended Plan (Plan 4).

2. The applicant shall notify the Department prior to initiation of each work item.

3. Appropriate best management practices shall be implemented prior to and during construction in order to prevent the movement of sediment into adjacent waters.

4. Mitigation for unavoidable environmental impacts shall be implemented as proposed. The applicant shall annually submit a report on progress of the project in Mississippi and status of mitigation.

5. The local sponsors shall be instructed to notify landowners of land side ponded borrow areas of the potential for contamination of fish by sediments already existing in the borrow areas and the need for testing prior to consumption.

6. No sewage, oil, refuse, or other pollutants shall be discharged into the watercourse.

7. On work items that require hydraulic dredging, the effluent turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50 Nephelometric Turbidity Units.

The Office of Pollution Control also certifies that there are no limitations under Section 302 nor standards under Sections 306 and 307 of the Federal Water Pollution Control Act which are applicable to the applicant's above-described activity.

If we can be of further assistance, please contact us.

Sincerely,

J. I. Palmer, Jr.
Executive Director

JIP:RHS:je

c: Mr. James Wanamaker, P.E., Chief Engineer
Board of of Mississippi Levee Commission
Mr. Kenneth L. Weiland, P.E., Chief Engineer
Board of Levee Commission for the Yazoo-MS Delta
Mr. Palmer Hough, EPA, Wetland Regulatory Unit
Ms. Cathy Mallette, State Clearinghouse

ENCLOSURE 5. MDEQ MINING PERMIT

Mississippi River Levee Deeson, MS
Item 611-L Seepage Berms

Notice of Exempt Operation Letter

The Notice of Exempt Operation Form has been submitted to the MDEQ Office of Geology, Mining and Reclamation Division.

BOARD OF
MISSISSIPPI LEVEE COMMISSIONERS
KENNETH RODGERS, PRESIDENT
P. O. BOX 637
GREENVILLE, MISSISSIPPI 38702-0637
662-334-4813
662-332-6732
FAX# 662-378-9592
WEB PAGE www.msleveeboard.com

COMMISSIONERS
KENNETH RODGERS, HUMPHREYS COUNTY
NOTT WHEELER, JR., BOLIVAR COUNTY
ROY NICHOLS, ISSAQUENA COUNTY
PAUL HOLLIS, SHARKEY COUNTY
KATHERINE CRUMP, BOLIVAR COUNTY
DAVID T. COCHRAN, JR., WASHINGTON COUNTY
PAUL DEES, WASHINGTON COUNTY

OFFICERS
PETER NIMROD, CHIEF ENGINEER
DUSTIN HERMAN, ASSISTANT ENGINEER
HEATH DOUGLAS, ATTORNEY
RACHEL McINTIRE, TREASURER
GINGER MORLINO, SECRETARY
STEVE POOLE, MAINTENANCE SUPERINTENDENT

March 28, 2025

MDEQ - Office of Geology
Attn: Mr. David Dockery
P.O. Box 2279
Jackson, Mississippi 39225

Re: Item 611L - Deeson Seepage Remediation
High Priority Work

Dear Mr. David Dockery:

Enclosed is the Notice of Exempt Operation Form requesting Surface Mining Permit exemption for Deeson` Seepage Remediation, Item 611L, High Priority Work. A Quad map has been included showing the location of the borrow pits and work area. Construction is scheduled to begin in September 2025 and is scheduled to be completed by July 2026.

Please address any questions concerning this exempt notification to Ryan Horton at 601-631-5019 at the Vicksburg District Corps of Engineers.

BOARD OF MISSISSIPPI
LEVEE COMMISSIONERS

Peter Nimrod, P.E., P.L.S.
Chief Engineer

Enclosures

cc: Ryan Horton (USACE)

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF GEOLOGY
Mining and Reclamation Division
P. O. Box 2279
Jackson, Mississippi 39225-2279
(601) 961-5515

NOTICE OF EXEMPT OPERATION

This form shall be filed with the Office of Geology, Mining and Reclamation Division **only** for operations affecting **4** acres or less *and* **greater** than **1320** feet from another mine. **NOTE**: Local, county, federal or other state agencies may also require permits before mining can be done on your site. This is *your* responsibility.

Name of applicant/operator: Mississippi Levee Board
Mailing address: P.O. Box 637
Greenville, Ms 38701
Telephone number: (662) 334-4813

Do you have any **other** exempt mining operations on file? [X] yes [ ] no
Do you plan to file for a **permit** and expand this site later? [ ] yes [X] no

Seepage Remediation Deeson, Item 611-L, Ms-High Priority Work

LOCATION

NE 1/4 of NE 1/4 of Section 27, Township 25N Range 7W County Bolivar

Name of land owner: Mississippi Levee Board
Mailing address: P.O. Box 637
Greenville, Ms 38701
Telephone number (662) 334-4813

Date operation to begin 09 - 2025 Date operation to end (estimated) 07 - 2026
Material to be mined clay Number of acres to be mined 81 (A)*
Total acres to be affected by operation (mine, roads, storage, etc.) 122 (B)*
Is operation **closer** than 1,320 feet (1/4 mile) to another mine? [X] no [ ] yes*

***If items A or B exceed 4 acres or you answered YES above, you need to apply for a MINING PERMIT.**

Applicant/operator: Peter Nimrod By _____
Signature

Date: 3/28/25 Position Chief Engineer of Mississippi Levee Board

---

For Office of Geology use only

Date: _____ By _____
Division Director
Mining and Reclamation Division

Form MRD- 9 rev. 08/05